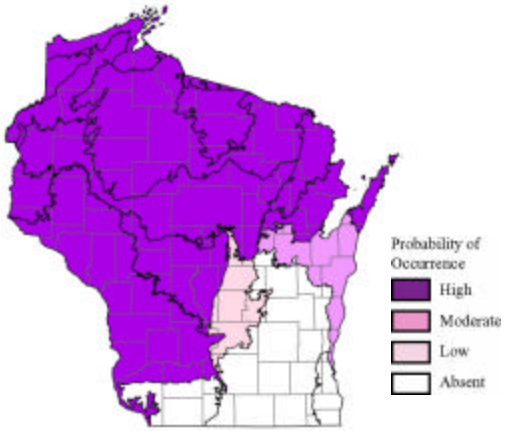
Wood Turtle (*Glyptemys insculpta*)

Species Assessment Scores*

State rarity:	3
State threats:	4
State population trend:	4.5
Global abundance:	4
Global distribution:	5
Global threats:	4
Global population trend:	4
Mean Risk Score:	4.1
Area of importance:	3

* Please see the Description of Vertebrate Species Summaries (Section 3.1.1) for definitions of criteria and scores.



Ecological Landscape Associations
Please note that this is not a range map. Shading does not imply that the species is present throughout the Landscape, but represents the probability that the species occurs somewhere in the Landscape.

Landscape-community Combinations of Highest Ecological Priority

Ecological Landscape	Community
Central Sand Plains	Alder thicket
Central Sand Plains	Floodplain forest
Central Sand Plains	Oak barrens
Central Sand Plains	Pine barrens
Central Sand Plains	Sand prairie
Central Sand Plains	Shrub-carr
Forest Transition	Coldwater streams
Forest Transition	Coolwater streams
Forest Transition	Northern mesic forest
Forest Transition	Warmwater rivers
Forest Transition	Warmwater streams
North Central Forest	Alder thicket
North Central Forest	Coldwater streams
North Central Forest	Coolwater streams
North Central Forest	Northern mesic forest
North Central Forest	Submergent marsh
North Central Forest	Warmwater rivers
North Central Forest	Warmwater streams
Northeast Sands	Bracken grassland
Northeast Sands	Coldwater streams
Northeast Sands	Coolwater streams
Northeast Sands	Pine barrens
Northeast Sands	Warmwater rivers
Northern Highland	Coolwater streams
Northern Highland	Submergent marsh
Northern Highland	Warmwater rivers
Northern Highland	Warmwater streams
Northern Lake Michigan Coastal	Northern mesic forest
Northern Lake Michigan Coastal	Shrub-carr
Northern Lake Michigan Coastal	Warmwater rivers
Northern Lake Michigan Coastal	Warmwater streams

Ecological Landscape	Community
Northwest Lowlands	Warmwater rivers
Northwest Sands	Coldwater streams
Northwest Sands	Coolwater streams
Northwest Sands	Pine barrens
Northwest Sands	Submergent marsh
Northwest Sands	Warmwater rivers
Superior Coastal Plain	Coldwater streams
Superior Coastal Plain	Coolwater streams
Superior Coastal Plain	Great lakes barrens
Superior Coastal Plain	Submergent marsh
Superior Coastal Plain	Warmwater streams
Western Coulee and Ridges	Coldwater streams
Western Coulee and Ridges	Coolwater streams
Western Coulee and Ridges	Dry prairie
Western Coulee and Ridges	Floodplain forest
Western Coulee and Ridges	Oak barrens
Western Coulee and Ridges	Sand prairie
Western Coulee and Ridges	Shrub-carr
Western Coulee and Ridges	Submergent marsh
Western Coulee and Ridges	Warmwater rivers
Western Prairie	Coldwater streams
Western Prairie	Coolwater streams
Western Prairie	Warmwater rivers
Western Prairie	Warmwater streams

Threats and Issues

- Dams can impede natural erosion and deposition processes in streams and negatively impact nesting opportunities by stabilizing banks and sand bars.
- Habitat loss and degradation from shoreline and other development in riparian corridors are a threat to this species.
- Clear cutting and development within 50 meters of streams can damage primary habitat and stream water quality.
- Over-collecting prior to Threatened-species designation and poaching appear to be locally significant sources of mortality.
- Invasive plants such as reed canary grass and giant reed grass may decrease shoreline habitat suitability.
- Invasive aquatic animals such as zebra mussels and bythotrephes change productivity pathways and food web dynamics in aquatic systems.
- A variety of potential problems related to water quality and aquatic invertebrate communities are poorly studied. Mercury, acid rain, road salt, and nutrient loads could all impact wood turtle prey availability.
- Recreation can disturb nesting, especially trout fisherman and canoeists utilizing sand bars and eroded banks in June.
- Road mortality can be locally significant where nesting on or along sandy roads occurs.
- Increased nest predation rates for this communal denning species may be seriously limiting population maintenance and recovery, resulting from unnaturally high populations of human subsidized predators (coyotes, raccoons, skunks, fox, etc.).

Priority Conservation Actions

- Permanent protection of shorelines and buffers is needed throughout the range.
- Permanent protection of important communal breeding sites and surrounding habitat is needed.
- Minimize sediment pollution and pesticide loading throughout the watershed to improve aquatic habitats and water quality.
- Allow natural stream erosion and deposition processes to operate (which provide nesting sites), protect riparian buffer zones, and manage streams overall for best water quality practices.
- Wildlife habitat in general is poorly represented in zoning and planning and major strides are needed in policy and education here.
- Control recreational access to communal breeding sites during nesting season.
- Research is needed to determine effective ways to protect nests and improve recruitment rates.
- Education is needed where wood turtles are being harvested for food.
- Long term monitoring is needed to evaluate population status and track trends of representative populations. Nest site monitoring is the most feasible.
- Three general wood turtle conservation recommendations are: a) protect wood turtles from exploitation (for food, biological supply, and pets); b) accurately determine and monitor distribution and status, especially of nest areas; and c) incorporate wood turtle habitat needs into other management plans (fisheries, forestry, river management; Buech 1995). See Buech and Nelson (1997) for further detailed recommendations.